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## The application and evaluation of goal attainment scaling to the Janis drug treatment program

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THE APPLICATION AND EVALUATION OF GOAL ATTAINMENT  
SCALING TO THE JANIS DRUG TREATMENT PROGRAM

by

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and

CAROL E. SWANSON

A research practicum submitted in partial  
fulfillment of the requirements for a degree of

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Portland State University  
1975

TO THE OFFICE OF GRADUATE STUDIES AND RESEARCH:

The practicum advisor approves the research practicum of  
Steven W. Kilber and Carol Swanson presented May 21, 1975.

  
Nancy Koroloff

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## CHAPTER I

### THE JANIS PROGRAM

#### I. AN OVERVIEW

Janis is a residential drug treatment program for drug abusers between the ages of twelve and eighteen designed to rehabilitate the participants. Five homes, each staffed by two trained residential coordinators and one student accommodate a total of thirty patients at a time. The treatment program consists of daily house meetings led by the residential coordinators, one group therapy session per week led by a psychiatric social worker, and individual therapy sessions with a psychiatrist as needed, as well as regular consultation with a psychologist and psychiatrist. The adolescents enrolled in the program are referred from a variety of agencies, including the Multnomah County Juvenile Court and Home, the Psychiatric Crisis Unit operated by the University of Oregon Health Sciences Center, and other out-patient treatment centers in Portland. Only those adolescents who are motivated to change their behavior are accepted into the Janis program.

Janis includes five phases of operation: Referral and Intake Interview, Intensive Residential Therapy, House Residence and Part-time Community Involvement, Out-patient Care, and Follow-up. The patients continue in each phase of the program until the therapist and participant agree that he is prepared to enter the next phase of the program. A social worker designs an educational and vocational program



for each program participant with that individual. Reality Therapy, Glasser's treatment model, is the basic model for all therapy in the program.<sup>1</sup>

## II. JANIS GOALS AND OBJECTIVES

The overall program goal for Janis is to reduce the level of social dependency and to increase the level of self-sufficiency among twelve to eighteen year-old drug abusers. The target population consists of those living in untenable or marginal living situations who require less than total institutionalization as part of their treatment. Emphasis is on those abusers in the early stages of the criminal justice system.

The treatment objectives toward meeting this goal include:

1. To reduce or alter the patterns of anti-social behavior manifested by Janis participants at time of admission.
2. To improve the educational level and/or vocation related skills of Janis Participants.
3. To obtain and maintain employment for those Janis participants sixteen years and older, not currently engaged in education or training program.
4. To maintain Janis residential program graduates in a stable living situation for one year after graduation from the residential program.

## III. THE TREATMENT PROGRAM

As indicated in Section I, Overview, the treatment program is

3

based on William Glasser's "Reality Therapy." This approach relies on the residents being made responsible for their own treatment. According to Glasser, "The skill of therapy is to put the responsibility upon the patient."<sup>2</sup> Responsibility is defined in two ways. The first way is that the patient must want to change. The second way is that the treatment environment must then demand responsible action from the patient, focusing on here and now behaviors. Glasser says that the proper function of any treatment institution is to provide a warm, disciplined atmosphere in which residents are required to assess their behavior in terms of responsibility.<sup>3</sup>

Glasser goes on to point out the importance of future planning in view of focusing on the past failures. This leads the patient away from scapegoating the past for his current problems.<sup>4</sup>

In the Janis program, this system becomes a four-pronged therapeutic approach. The approach "Emphasizes present behavior problems... behaving in the everyday world is the focus of concern, not psychological mechanisms."<sup>5</sup> The first three prongs are outlined in the original program write-up to include: 1) "Treatment through daily individual sessions with residents focusing on daily issues, mood swings and communication skills;" 2) "Group sessions weekly with a psychiatric social worker dealing with more in-depth issues;" and 3) "Therapeutic community consisting of inpatient care directed toward residents taking responsibility for themselves with the help from staff;"<sup>6</sup> 4) Family counseling to help the family "change its method of dealing with the adolescent's behavior."<sup>7</sup>

The therapeutic community is further defined in the 1974 funding request<sup>8</sup> to include several elements:

1. Utilization of daily structure to counteract the previous lack of structure in residents' lives. This includes basic rules; no drugs, no criminal activities, no interference with basic procedures such as urinalysis, considerate behavior toward others, and completion of therapeutic contract.
2. Development and utilization of peer group identification within the house to help adolescents "to get straight together."
3. Prohibition of use of drug usage while in the program and the monitoring of usage through routine urinalysis.
4. Anti-social acts are confronted immediately with consequences applied for the behaviors.
5. Availability of psychiatric interventions including continuous supervision, use of psychotropic drugs and immediate psychiatric treatment when needed.
6. Utilization of treatment contracts in which "each participant specifies those areas in which he wants to change and determines just how this will occur."

Overall then, the Janis Treatment Program may be summarized as a "participatory therapy where the adolescent sets goals and selects services which he believes will help him reach his goals."<sup>9</sup>

## REFERENCES - CHAPTER I

<sup>1</sup>Multnomah County Community Action Agency, "Janis: A Drug Treatment Proposal," December 1, 1971, p. 22.

<sup>2</sup>William Glasser, Reality Therapy: A New Approach To Psychiatry, (New York: Harper & Row, 1965), p. 28.

<sup>3</sup>Ibid., p. 29.

<sup>4</sup>Ibid., p. 37.

<sup>5</sup>Janis Project, "Janis: Progress Report," April, 1973, p. 8.

<sup>6</sup>Multnomah County Community Action Agency, "Janis: A Drug Treatment Proposal," op.cit., p. 9.

<sup>7</sup>Janis Project, "Janis Drug Abuse Services Project," September 1, 1974, p. 48.

<sup>8</sup>Ibid., p. 47, 48, 49.

<sup>9</sup>Janis Project, "Janis: Progress Report," op.cit., p. 10.

### III. RESEARCHERS INVOLVEMENT

The researchers entered the program in October, 1974 at the request of the Director of Programs. The purpose was to provide assistance in developing and evaluating the Individual Plans and Outcomes system in the Hawthorne House. The researchers role was essentially that of evaluation and consultation in program development.

The initial project task included three areas: 1) researching materials and learning about Goal Attainment Scaling model; 2) understanding Janis Program goals and Hawthorne House Program; 3) establishing a working contract between the researchers and the Janis Director of Programs.

The first step, including a review of the literature on Goal Attainment Scaling, was done in October and November. The majority of material reviewed was obtained from the Minneapolis Program Evaluation Project. Also, the application of Goal Attainment Scaling to another setting, Case Management, was examined by the researchers during this time. Case Management Corrections Services had been using Goal Attainment Scaling for one year.

The second step, an understanding of the Janis Program goals and objectives, was imperative in the development of Goal Attainment Scaling in the Hawthorne House Program. A series of meetings and discussions were held with the Director of Programs and the Hawthorne House staff to gain an understanding of the Janis Program. This understanding was particularly important because of the uniqueness of each of the Janis treatment houses. Understanding the needs of the staff and of Hawthorne House was essential in providing effective consultation. The researchers

understood that the primary commitment and responsibility to developing and maintaining the program was with the Hawthorne House staff. The relationship between researchers and staff that developed during the meetings allowed the researchers to give input and suggestion to the staff while the primary responsibility for the program remained essentially with the Hawthorne staff.

The Hawthorne House had been using the IPO System for one month prior to the researchers involvement. A review of the scales used during this time gave the researchers some information on how the program was being utilized. The number of different scales and the frequency of use between September 27, 1974 to November 1, 1974 is included in Table I. Analysis of scale headings indicates the predominate use of the IPO system was for house maintenance issues. Goals in attendance of group therapy, completion of chores, and completion of IPO's themselves, accounting for three of the four most frequently used scales. (See Table I, p. 9).

The third step, developing a written agreement with the Janis Director of Programs, was the outcome of steps one and two. This written agreement is included in Appendix A. Because of the researchers limited time frame, it was particularly important to clarify what the research project goals and limits were.

TABLE I

SCALES CONSTRUCTED AT HAWTHORNE HOUSE  
SEPTEMBER 27, 1974 to NOVEMBER 1, 1974

Scales Presently Used or Being Used	Frequency
Group. . . . .	22
Chores . . . . .	22
Job Interviews . . . . .	9
Clinton School Ad. . . . .	1
IPO. . . . .	5
GED Test . . . . .	4
College. . . . .	4
College Attendance . . . . .	1
Personal Meeting . . . . .	2
College Preparation. . . . .	2
School . . . . .	1
School Attendance. . . . .	3
Job - attendance . . . . .	2
GED - studying . . . . .	1
GED - hours studied. . . . .	2
Jobs - Places visited. . . . .	1
GED - Grammar Test . . . . .	1
Part-time Job. . . . .	2
Parents visits . . . . .	1
Work Attendance. . . . .	1
TOTAL - 20 scales	

## CHAPTER III

### INTRODUCTION TO GOAL ATTAINMENT SCALING

#### I. BACKGROUND ON GOAL ATTAINMENT SCALING

Goal Attainment Scaling, referred to as GAS, is a system in describing and evaluating problems and objectives. It can be used for either treatment objective-setting or outcome measurement purposes.<sup>1</sup> GAS, originally developed in a community mental center, has since been adapted to a variety of human services programs.

Goal Attainment Scaling was developed by Drs. Thomas Kiresuk and Robert Sherman of the Hennipin County Mental Health Clinic, Minneapolis, Minnisota. It was developed in the response to a need by mental health professionals for effective evaluation of mental health services. The technique was implemented by the Program Evaluation Project, headed by Dr. Kiresuk and funded through the National Institute of Mental Health. The Program Evaluation Project, PEP, examined the feasibility, reliability and validity of the Goal Attainment Scaling approach.<sup>2</sup>

This chapter begins with a discussion of basic Goal Attainment Scaling Procedures. The next part deals with utilizing Goal Attainment Scaling for evaluation purposes. The final section describes the flexibility of Goal Attainment Scaling.



## II. BASIC GOAL ATTAINMENT SCALING PROCEDURE

There are many variations on the exact pattern of Goal Attainment Scaling. They all rely on the four basic steps:

Step 1: Collection of information about the person for which goals will be scaled.

Step 2: Specification of the major areas where change would be realistic and helpful.

Step 3: Development of specific, behavioral predictions for a series of outcome levels for each major area.

Step 4: Scoring the outcomes at a later follow-up time.

The first step, collection of information, may come from a variety of sources, such as client statements, reports from spouse, relatives, or other agencies. How the information is gathered depends upon the setting. A common approach for information collection is from client interviews.

The second step involves designation of problem areas for the client. The problem areas are delineated from the information collection in Step #1. Problem areas are defined as undesirable behaviors which could be minimized or favorable behaviors which could be increased.

The process of selecting problem areas may be carried out by the clinician alone, the client alone, the clinician and the client together or another involved party, such as the family. This procedure varies to fit the needs of the agency.

The designated problem areas are then recorded on a Goal Attainment Follow-Up Guide. Each problem area is used to develop a five

level scale of possible behavioral outcomes. The following figure illustrates one problem area and a developed scale, as how it would appear on a follow-up guide.

Levels of predicted attainment	A. Scale Heading (Interest in finding work) Employment	A. (Scale Heading)
Most favorable outcome thought likely	Client employed full time & self-supporting	
More than expected outcome	Client employed full time by end of treatment	B. Levels of Prediction
Expected level of outcome	Client employed part time by end of treatment	
Less than expected outcome	Client had job but lost it by end of treatment	
Most unfavorable outcome thought likely	Client did not obtain job by end of treatment	

Figure 1. A sample Goal Attainment Scale.

The problem area to be scaled, is given a title to reflect a general behavioral concern. The title is entered under the box A. "Scale Heading," of above. The titles may be general, conceptual areas that reflect the content of the scale.

The third step in Goal Attainment Scaling procedure is developing five specific predictions of the outcome in each problem area. This is indicated by letter B. on the Figure 1. The prediction includes a time designation at which the follow-up measurement will take place.

The five specific predictions make a behavioral continuum of

possible client outcomes. These five outcomes provide a range from "most favorable outcome thought likely," "more than expected level of outcome," "expected level of outcome," "less than expected outcome," "most unfavorable outcome thought likely." Predictions should be realistic and relevant to the client. These five levels with behavioral predictions assigned to them, comprise a scale. The "expected" level of outcome represents the most realistic prediction of the change in client's behavior during treatment. In developing scales on the follow-up guide the expected level of outcome should be constructed first.

### III. GOAL ATTAINMENT SCORING PROCEDURES

Goal Attainment scoring is based on assigning numerical values to the five possible levels of outcome. These numerical values can be used to compute a score reflecting the clients outcome from treatment. The PEP used a numerical value range of -2 to +2 as indicated below.

Most favorable outcome	+2
More than expected level	+1
Expected level of outcome	0
Less than expected level	-1
Most unfavorable outcome	-2

Figure 2. Numerical values of outcome levels.

The numerical values can be used to provide two different scoring measures: 1) whether or not the expected level of outcomes were reached; and 2) whether or not change occurred.<sup>3</sup> In measuring client change, the follow-up guide is marked to reflect the level of functioning of the client at the time of intake. The guide is marked again at follow-up time to reflect the clients functioning then. The score is determined by the change between intake and follow-up levels of functioning.

The follow-up interview occurs at a specified time after treatment has started. The procedure for the follow-up interview varies with the agency. The scores can be used for feedback to administrators, clinician's or clients. The scores reflect "whether or not treatment accomplished what it was supposed to accomplish."<sup>4</sup>

#### IV. VARIATIONS OF GOAL ATTAINMENT SCALING

There is a wide range of applications and variations of GAS which can be used to meet the needs of specific agencies. The use of the methodology is expanding as more knowledge is gained around its possible uses. The method is flexible to many different settings. The next chapter will discuss in detail a variation of GAS developed for the Janis Program.

### REFERENCES - CHAPTER III

<sup>1</sup>Thomas J. Kiresuk, Geoffrey Garwick, Chapter One, Program Evaluation Project Report, 1969-1973, Basic Goal Attainment Scaling Procedures, 1974, p. 3.

<sup>2</sup>Ibid, p. 3.

<sup>3</sup>Ibid, p. 6.

<sup>4</sup>Ibid, p. 7.

## CHAPTER IV

### APPLICATION OF GOAL ATTAINMENT SCALING TO THE HAWTHORNE HOUSE

The Janis Individual Plans and Outcomes system, abbreviated to IPO system, is a modification of Goal Attainment Scaling. The modifications were designed to meet the requirements of the Janis Program and its target population. The modifications make the IPO system a therapeutic tool in itself as well as providing a measure of treatment success. The following are six specific modifications contained in the Hawthorne IPO system. The features are followed by a step-by-step description on how the system works.

#### I. MODIFICATIONS OF GOAL ATTAINMENT SCALING FOR THE HAWTHORNE HOUSE

##### 1. Resident Involvement

The resident is involved in his own goal planning and goal achieving. Mutual planning conferences are held between the resident and staff to plan out goals. The resident commits himself to the goal in a contract format. This is done in a Mutual Planning sheet (Figure 6., page 27 ). The resident lists his goals and the mutually agreed commitment toward meeting the goal. The commitments are written as specific, measurable behaviors the achievement of which can be measured objectively. The mutual planning fits nicely into the treatment framework. The resident is responsible for the goal selected,

and held responsible for his action in attaining the goals. The IPO is a reality check for the resident, constantly reminding him of why he is in the program, and providing reality feedback on his behaviors in attempting to reach his goals.

## 2. Realistic Achievable Goals

An important benefit for the resident involvement comes from the experience of setting realistical goals and then achieving the goals. Most of the adolescents referred to the program have long histories of failure. The systematic achieving of goals breaks through much of the failure posture of the residents. The goals used on IPO's are success oriented. In the mutual planning conference the focus of effort is to help the resident set realistic goals.

## 3. Standardized Goal Areas

Related to the first two features is the nature of the goals. The types of goals which the program can help residents meet have been standardized. The goals consist of two types: program goal and personal growth goals. Program goals are related to specific treatment objectives of the Janis Program. The objectives are discussed in CHAPTER I. The objectives are translated into three goal areas on the IPO: 1) Educational and Vocational Skill Development; 2) Financial Independence, including employment and saving earnings; 3) Post Placement Living, including where the resident plans to go after graduation, plus specific skills needed to make that plan a success. The personal growth goals provide the fourth goal area. These are personal change goals selected by the residents.

#### 4. Positive Goals

The fourth unique feature is focusing goals on positive behaviors. Although the residents come to the program because of extensive illegal or anti-social behavior, the goals used to focus treatment avoid these negative behaviors. Goals must be positive and constructive in order to be used on the IPO's. This focuses the resident away from his past problems and his negative self-concept, and toward the issue of "What good things in life do I want? and How do I get them?"

#### 5. Resident As Source Of Information

The fifth feature is the reliance on the resident as the primary source of information on attainment. Only in special situations has information from other sources been used to determine the attainment level. This is principally for therapeutic reasons to establish trust and to re-emphasize the residents responsibility for his own progress.

#### 6. Integrated Long-Term And Short-Term Goals

To strengthen and bring immediacy to the IPO program, an integrated system of long-term and short-term IPO's is employed. This feature is essential for adolescents whose focus is relatively short-term, who are inexperienced in goal setting and achieving and who tend to change goals along with moods and clothes. The short-term IPO's are done weekly and they supplement the previously established long-range goals. The weekly IPO contains program goals that are incremental or additive toward the long-range goal. Integrated system teaches the process of breaking a goal down into small achievable steps.



The weekly IPO provides the bulk of success and goal setting experience for the resident. They provide the most real and relevant feedback on the residence performance. They also provide the repeated message that the resident is responsible for his own actions.

The long-range goals provide the overall purposefulness of residence at Janis. They provide the stability over the day-to-day, week-to-week fluctuations in the residents personality. The long-term IPO's provide the measure of progress in treatment, using a monthly review system and a time table of steps toward the long-term goal. The long-term IPO provides the program evaluation component, the measure of success which is defined as the ability of the program to help the resident.

## II. USE OF THE INDIVIDUAL PLANS AND OUTCOMES SYSTEM

The basic structure of the GAS, and the special Janis features previously discussed, have been combined into the IPO system. The system begins at intake for the resident.

### Intake

Referrals received are screened for appropriateness based on referral information and personal and family interviews. If an adolescent is seen appropriate, one of the five Janis houses is selected for him based on his needs. An intake interview is then held with the child, parents, caseworker, house staff and intake worker. The program and expectations of Janis are presented to him including the purpose and purposefulness of the Janis program. He is told of his expectations to work on change, and of the change contract. If

he is going into the Hawthorne House he is told about the IPO system.

### Long-Term Goals

If he is accepted to Hawthorne, he is given two weeks to work with the house parents to develop the long-term goals. He is required to set at least one goal in each program area. These goals are then transcribed onto a form, Progress on Completion of Long-Term Goals, Figure 4, with the specific steps toward completion laid out by the resident and house parent together.

The resident at this point establishes his own graduation date from the program. The date of termination is one of the most crucial commitments requested of the resident. It provides a sharp awareness of the reality that Janis is only a temporary home, that there is urgency in working on the goals. The definite termination date generally helps the termination be more constructive for the resident.

With the establishment of long-term goals, the house parents then scale the goals on the Individual Plans and Outcomes Follow-Up Guide.

The key element is the translation of the residents commitment to the expected level of functioning. This is crucial in making the follow-up guide a statement of the residents commitment. It helps the resident feel relevance in the follow-up guide, and it provides an implicit message that "we expect you to make your commitment." These long-term follow-up guide are marked for level of functioning at Intake, and are filed away until the completion date.

The long-range IPO's can be scored two different ways. They can be scored to provide a measurement of change in the residents during

treatment, or they can be used to measure the program's effectiveness in helping residents meet their goals. If measurement of change is desired, a scoring system involving marking the follow-up guide for intake level and for follow-up level can be utilized. A score for the change can be obtained by using a procedure such as the Program Evaluation Project. If measurement of attainment of goals is desired, the scoring system described for short-term IPO's discussed in the next section, can be used.

The long-range IPO system is illustrated in the next two pages to clarify the process described. The examples are fictional so as not to divulge confidential information about any of the residents.

The "X" on the follow-up guide, Figure 3, indicates baseline level, or level at intake, with the comments section used to clarify the actual behavior at intake time.

The long-term goals can retain some flexibility. The residents progress sheet can be changed to reflect new long-range goals. This is done at the monthly case review process. Changing long-term goals requires careful consideration before being done. Once a long-term goal is changed it must be rescaled and marked for baseline level of behavior, the level at which the resident is at the time of the change.

#### Weekly IPO System

The weekly IPO's constitute the major staff time commitment in this program. The importance they play in the therapy has been discussed. The weekly IPO system begins for the resident as soon as he establishes long-term goals.

The weekly IPO begins in the mutual planning conference on Sunday

INDIVIDUAL PLANS AND OUTCOMES FOLLOW-UP GUIDE

NAME: Mary Smith

DATE:

PLANS AND OUTCOMES

LEVELS OF PREDICTED ATTAINMENT	SCALE # 1 <u>Voc. Ed. Goal - GED</u>	SCALE # 2 <u>Financial Independence</u> (Savings)	SCALE # 3 <u>Post-Placement Living</u> (Apartment)	SCALE # 4
MOST FAVORABLE OUTCOME THOUGHT LIKELY	Completed before and completed additional CC classes.	Saved over \$500.00 by July 1, 1975	Moved to apartment with adequate supplies and with an on-going source of income.	
MORE THAN EXPECTED SUCCESS	Completed GED before June 20, 1975	Saved between \$400.00 and \$500.00	Moved to apartment with adequate supplies and furnishings	
EXPECTED LEVEL OF SUCCESS	Obtained GED by 6/20/75	Saved \$400.00 by July 1, out of earnings	Moved into apartment by July 1, 1975	
LESS THAN EXPECTED SUCCESS	Obtained GED after June 20, 1975	Save \$300.00 \$200.00 \$100.00	Moved elsewhere by July 1, 1975  X	
MOST UNFAVORABLE OUTCOME THOUGHT LIKELY	Did not obtain GED  X	Saved less than \$100.00  X	Out on street without permanent residence	
			Comment at Intake: Resident residing at home	

8-12-74

Figure 3. Sample Individual Plans and Outcomes Follow-Up Guide

<u>PROGRESS ON COMPLETION OF LONG TERM GOALS</u> NAME <u>Mary Smith</u>			
LONG TERM GOALS	EXPECTED COMPLETION DATE	COMPLETION DATE	COMMENTS (Date Comments)
1. Graduation from Janis	7/1/75		
2. Educational - Vocational goal			
1. To obtain GED Certificate	6/20/75		
- to enroll in GED	2/1/75	1/24/75	
- to take first test	4/15/75		
second test	5/8/75		
third test	5/15/75		
3. Financial Independence			
1. To save one-half of my earnings for total of \$400.00	6/15/75		
- to look for job	2/1/75	2/2/75	
- to secure part-time work	2/15/75	2/12/75	
- to start up Savings Account	2/20/75	2/20/75	
- to save \$100.00	3/15/75	4/1/75	
- to save \$200.00	5/15/75		
- to save \$300.00	5/15/75		
4. Post-Placement Living			
1. To move into an apartment after Janis	7/1/75		
- to purchase dishes	6/1/75		
- to get bedding	6/11/75		
- to start looking for apartment	6/15/75		

Figure 4. A sample: Progress on Completion of long-term goals form.

afternoon. The resident meets with a member of the house staff and completes the Mutual Planning Form (Figure 5.). This form is subdivided into 4 areas reflecting three program goal areas and one area for personal goals. The form is columned into two parts. The left side is the goal in the broadest phrasing. This is used for scale heading. On the right is the commitment that the resident makes for the week toward his goal.

It is the Mutual Planning commitment that becomes the basis for the IPO. The IPO follow-up guide construction takes place in midweek as the house parents have time. The follow-up guide is constructed based on the construction guide (Appendix B) and the needs of the resident. The resident's planned commitment, transfers to the expected level of outcome as in the long-term IPO. It is crucial that the resident receive staff help in phrasing his commitment in specific behavioral terms. After completing the expected level of outcome on the IPO, the staff member completes the most favorable and most unfavorable levels, with the intermediate levels completed last.

The completed follow-up guide is then held for outcome measurement. This is done on the following Sunday as part of the next Mutual Planning conference. Performance data is obtained from the resident. The IPO is marked and shared with the resident providing reality feedback on his behaviors.

The weekly follow-up guides are not marked for intake level of functioning. They are not being used to measure change, but to reflect the degree of achievement on the residents goal. The attainment scores used on weekly follow-up guide is the numerical value assigned

to the scale level which reflects the resident's behavior. The scores range from +1 to +5 reflecting the scales levels from most unfavorable to most favorable outcomes. The resident who attains the expected level of outcome scores a +3. The scoring process was refined after five weeks of usage to allow for subdivision of levels so that we, in effect, have fractional attainment scores. The use of this subdivision is illustrated in Figure 5.

Expected level of success	Attended four days
Less than expected level of success	Attended 3 days ———— Attended 2 days ———— Attended 1 day
Most unfavorable outcome thought likely	Did not attend

Figure 5. Partial scale illustrating use of subdivision of a level.

The less than expected level is subdivided into three behavior outcomes to reflect more specific performance of the resident. The scoring of the subdivision is done by assigning fractional values to the behavior outcomes. The values would be as follows: attended three days equals 2.5; attended two days, equals 2.0; attended 1 day equals 1.5. The expected level would retain it's numerical value of 3. The formula for computing subdivision scores is:  $2 + (\text{Number of subdivisions} + 1)$ . This formula provides the fractional increment between subdivision levels.

The subdivision process was initiated to provide more specific feedback to the resident's on actual attainment, especially on levels which could cover a wide range of resident behaviors. The use of positive attainment scores rather than the +2 to -2 range of the GAS was intended to further underscore the positive focus of the IPO program.

The weekly IPO's are kept in a file for case review. The progress made on weekly attainments is recorded on the "Progress On Completion Of Long-Term Goals," Figure 2, by filling in the completion date column on the form.

The system is complex, so to clarify it we have included examples of a Mutual Planning form and the IPO Follow-up Guide generated from it. The examples are not from a particular resident but are composites calling on features common to many of the forms complete at the Hawthorne House. These examples are based on the long-term goals developed in the previous section. The continuity of the sections is to illustrate the connection between long-term and weekly IPO's.

#### Monthly Case Review

The monthly case review provides the integration of the long-term and the weekly IPO systems. The function of the monthly case review is to assess the progress and problems of the resident. The weekly IPO's and Progress form are used to help assess the residents progress toward his long-term goals. It is at this meeting that residents can reassess their long-range goals and modifications or substitutions can be made if it is agreeable to all parties. If the resident is consistently behind his time line or is not complying with other commitments that



MUTUAL PLANNING	
NAME: <u>Mary Smith</u> WEEK DATED _____	
THIS WEEK'S GOALS	MUTUAL PLANNED COMMITMENTS (Include Days and Hours)
<u>Skill Development</u> Educational Goal - #1 Study GED Educational Goal - #2 GED test  Vocational Goal - #1 Vocational Goal - #2	#1 I will go to GED classes Tuesday and Thursday - 1:00 to 4:30 p.m. #2 I will take my Math test Thursday, April 10, at 1:00 p.m.  #1 #2
<u>Financial Independence</u> Employment Goal - #1 <u>None</u> Employment Goal - #2	#1 I will go to work Monday, Wednesday, Friday - 9:00 a.m. to 5:00 p.m. #2
<u>Post Placement</u> Post Placement Living Goal #1  Post Placement Living Goal #2	#1  #2
<u>Personal Growth</u> Personal Goal #1 Visit Family Personal Goal #2 Personal Goal #3	#1 I will visit with my family on Saturday from 3:00 to 5:00 p.m. #2 #3

Figure 6. A sample mutual planning form.

INDIVIDUAL PLANS AND OUTCOMES FOLLOW-UP GUIDE

NAME: Mary Smith

DATE:

PLANS AND OUTCOMES

LEVELS OF PREDICTED ATTAINMENT	SCALE # 1 <u>Ed. Goal #1 - Study GED</u>	SCALE # 2 <u>Ed. Goal #2 - GED Test</u>	SCALE # 3 <u>Financial Independence Work Attended</u>	SCALE # 4 <u>Personal Goal #4 Visit Family</u>
MOST FAVORABLE OUTCOME THOUGHT LIKELY	Went to GED class plus studied outside of class 2 hours or more	Took GED Test and passed it.	Went to work 3 days plus worked more than 2 hours over- time	Visited family. Set 3-5 Saturday plus arranged for another visit
MORE THAN EXPECTED SUCCESS	Went to GED class plus studied outside of class up to 2 hrs.		Went to work 3 days plus worked 1 to 2 hours overtime	Visited family Saturday 3-5 and resident reported feeling satisfied
EXPECTED LEVEL OF SUCCESS	Went to GED Class Tuesday and Thursday 1-4:30 p.m.	Took GED Math Test Thursday a. 1:00 p.m.	Went to work 3 days from 9:00 to 5:00	Visited family Saturday 3:00 to 5:00
LESS THAN EXPECTED SUCCESS	Went to GED Class one day	Took GED Math Test later than Thursday at 1:00 p.m.	Went to work 2 days; 1 day	Visited family Saturday but did not last 2 hours
MOST UNFAVORABLE OUTCOME THOUGHT LIKELY	Did not go to GED class	Did not take GED test this week	Did not go to work this week	Called off visiting family.

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Figure 7. A Sample weekly IPO follow-up guide.

he has made, he may be given consequences or even dropped from the program.

Summary:

The IPO system is the expansion of Goal Attainment Scaling into a complex treatment, progress-monitoring system. It involves many modifications on GAS as it has been used in Mental Health Clinics. It retains the value of measuring attainment at five different levels rather than just a pass-fail system. It involves the resident and house staff in mutual goal setting toward goals that are relevant to the resident.

## CHAPTER V

### USE OF SCALE ASSESSMENT TO IMPROVE SCALE QUALITY

One of the key skills in using Goal Attainment Scaling is the ability to scale goals effectively. In the Janis IPO program this remains true. Quality scaling is necessary both for accurately measuring the residents behavior and in providing meaningful feedback to the resident.

In order to improve and standardize the quality of scales constructed by the Hawthorne House staff, two processes were utilized. First a brief manual for construction was developed. This is the "Guide to Scale Construction" (Appendix B). The second was to utilize a scale assessment system for training in the technical features of scale development. It is this scale assessment system that is presented in this chapter.

The scale assessment system was selected as the training tool for several reasons. It was an already existing tool employed by the Program Evaluation Project staff. The reliability and utility of the tool had been adequately tested. The tool was modifiable for use in Janis. The assessment system, further, contains a built-in measurement system to assess progress.

The assessment system evaluates the scales on the weekly IPO's after they are constructed. Feedback can then be provided to the house parents so that they improve on problem areas in their scale construction.

## I. BACKGROUND ON GOAL ATTAINMENT SCALE ASSESSMENT SYSTEM

The scale assessment system used for the Hawthorne House project is based on the GAS assessment system outlined in "Preliminary Working Paper on the Manual for the Standardized Assessment of the Goal Attainment Follow-Up Guide," by Garwick and others. The foundation and utility of this system is described in the above publication and will not be fully discussed here. Briefly the process involves the steps indicated in Figure 8.

The scale construction is done by an intake level mental health practitioner who establishes both goal and scales after an intake interview with the client. The follow-up guide is then assessed by two research staff members based on an extensive system of point deductions for specific problematic features. The two independent assessments are then collated, i.e., the point deductions are averaged to produce a single assessment form covering each follow-up guide. The collated score is compared to an established score for acceptability. If the collated score falls below this level, the form is returned to the constructor for negotiation on the problematic features. Not all violations need be corrected. In some cases considerations are made for special clinical circumstances that demand special scale construction, which, if adequately explained, do not draw any point deductions. After negotiation the score is reassessed and sent to follow-up or scrapped if it is still unacceptable.

If the collated score falls above the cut-off level, the guide is sent to storage until the follow-up date. Follow-up is conducted

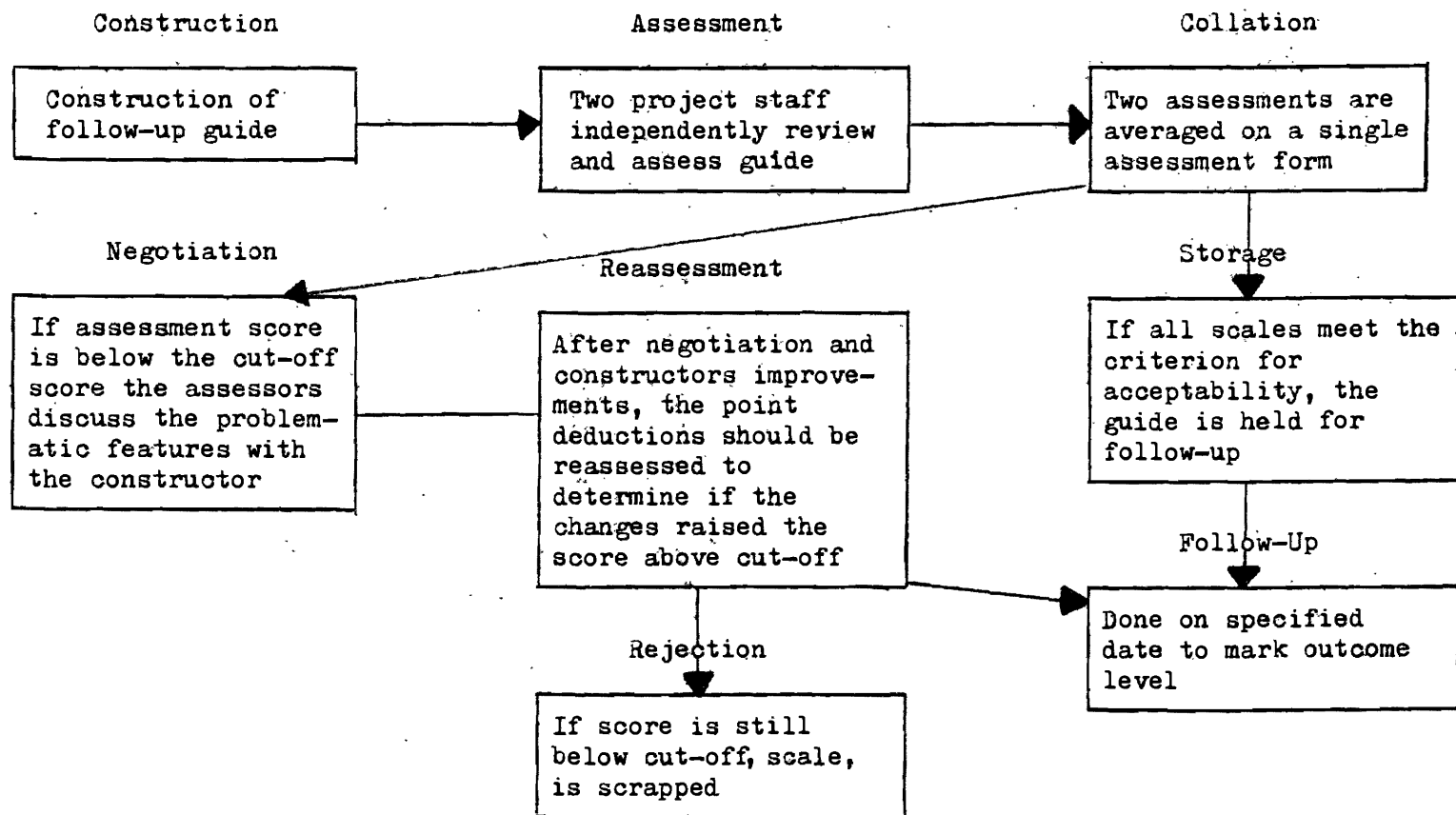


Figure 8. Goal attainment assessment system.

by additional research personnel to determine outcome level for the client.

For more information on the Goal Attainment Scaling Assessment, we refer you to the above mentioned publication.

## II. THE JANIS ASSESSMENT SYSTEM

The GAS scale assessment system was modified to meet the specific needs of the Janis Program. These needs are outlined in Chapter IV and in the "Scale Construction Guide." The modifications were made in the assessment process and in the assessment instrument.

In the assessment process the deviation from the GAS system occurs after collation. Because the focus is on training as well as evaluation, the IPO's are not scored against a minimum acceptability criterion but rather are scored and then reviewed by house parents. Negotiation does take place if some of the point deductions are disputed by the constructor. The score can be modified in this way before the scale goes to follow-up. No scales are actually rejected in this system. On the short-term IPO's, follow-up usually occurs one week after construction. Follow-up is done by the same worker who constructs the scale, which again differs from the GAS system.

In the instrument the modifications include the elimination of four of the problematic features used in the original GAS scheme. They were eliminated because they were not applicable because of modifications in the program. Included in the deletions were the following features which were considered problematic: 1) Only some scales weighted; 2) Should comment be typed on guide; 3) Is mention of level

at intake necessary; 4) Date implied contradicts follow-up date.

Seven items were added to the list because of specific requirements of the Program. These seven items are problematic features "O" through "U" in the point deduction system. These modifications do not alter the basic design or effect the validity of the instrument or the process. The modified point deduction system, as it was used, is included as Appendix C, "Description of Categories of Problematic Features and the Recommended Point Deduction Associated with Each Category." The "Description" is a listing of specific problems that interfere with the effective use of the scale at follow-up. The point deductions reflect the degree to which the problem interferes with follow-up. Assessment is the process of establishing a score for each scale based on whether one or more of the problematic features listed appear in the scale.

### III. THE USE OF THE IPO ASSESSMENT FORM

The following, Figures 9 and 10, are the front and back respectively of the modified assessment form. The modifications include changes in the specific problematic features discussed in the previous section which are listed on the front page left column along with the corresponding letter code. The second modification is the reduction of the number of scales from five to four to correspond to the Janis IPO form. The third modification is the addition of the comment section on the back (Figure 10). The latter was particularly important due to the training focus. This space allows for positive comments on good features, and allows for suggestions to improve the scale.



HAWTHORNE HOUSE PROJECT Follow-up Guide Assessment Follow-up Guide _____ Date _____ Assessor _____ Date _____		FOLLOW-UP GUIDE SCORES			
		Scale 1	Scale 2	Scale 3	Scale 4
A. Request confirmation that follow-up guide is exhaustive, or request additional scales. (20,0)	most favorable				
B. Two adjacent blank cells. (20,20)					
C. Extrapolation possibilities unclear. (4,4)					
D. Interpolation possibilities unclear. (4,3)					
E. Date implied in follow-up guide contradicts specified follow-up date. (20,0)					
F. Source of verification unclear. (2,1)					
G. Greater specification of item needed. (4,3)					
H. Request further distinction of 2 or more scale levels which may overlap. (4,4)	more than expected				
I. Multi-dimensional scale: insert "and/or," or indicate if statements are intended as examples. (5,1)					
K. Assumption of cause-effect: request change or justification. (3,1)					
L. Have all possibilities been considered? (2,1)	expected				
M. Unknown abbreviation or term. (0,0)					
N. Illegibility. (0,0)					
O. Insufficient program goals. IPO does not contain scales reflecting long range goals of resident. (10,0)					
P. Negative focus to goal: goal focuses on negative behavior. (10,0)					
Q. Relationship to mutual planning unclear. (10,0)	less than expected				
R. No date: the date of mutual planning meeting and review date must be on the IPO. (5,0)					
S. No clear behavioral indicator. (20,0)					
T. Change in behavioral indicator: the same primary behavioral indicator must appear in each level. (10,0)					
U. Inconsistent scale heading. (5,0)	most unfavorable				
Z. Other					
score					

Figure 9. The face section of the IPO scale assessment form.

FOLLOW-UP GUIDE COMMENTS			
SCALE 1	SCALE 2	SCALE 3	SCALE 4

Figure 10. The backside of the IPO scale assessment form.

The right half of Figure 9 is the assessment grid which corresponds to the four scales on the IPO. The grid depicts the five possible levels of each scale. Each box, representing an individual outcome level, has a dotted line dividing it in two. The portion to the left is used to list the letter indicating a specific problematic feature in that level of the corresponding scale. The area to the right is used to describe the problematic feature, and the point deduction for that feature. The point deductions are then added together. The sum is subtracted from twenty to give the scale score which shows up at the bottom of the scale. Additional comments are made in the corresponding box on the back.

To illustrate the use of the scale assessment system, we have developed a sample IPO follow-up guide (Figure 11), and provided a follow-up guide assessment (Figures 12 and 13) of that IPO. The assessment form contains a listing of titles of the problematic features, and the letter designation for the feature.

This example is not intended to answer all questions about the assessment process. It is intended to illustrate the basic features. The problematic features found on this sample IPO won't be dealt with in the text. The letter designations of the problems appear on the front of the form on the grid space corresponding to the scale and the level where the problem appears on the IPO. The problematic feature can be best understood by referring to comment section of the form (Figure 13), and the descriptions in Appendix C.

<div style="text-align: center;"> <u>INDIVIDUAL PLANS AND OUTCOMES FOLLOW-UP GUIDE</u> </div>				
NAME: Mary Smith		DATE: April, 1975		
<u>Weekly</u> <u>PLANS AND OUTCOMES</u>				
LEVELS OF PREDICTED ATTAINMENT	SCALE # 1 <u>School Attendance</u>	SCALE # 2 <u>Job</u>	SCALE # 3 <u>Job Search</u>	SCALE # 4 <u>Smoking</u>
MOST FAVORABLE OUTCOME THOUGHT LIKELY	Get at least 2 "A" grades this week		Looked for a job and found one	
MORE THAN EXPECTED SUCCESS	Went to school 5 days this week			Has decided to quit smoking completely
EXPECTED LEVEL OF SUCCESS	Went to school 4 days this week	Went to work Monday, Wednesday and Friday	Looked for a job this week	Didn't want to smoke this week
LESS THAN EXPECTED SUCCESS	Went to school 2 days or less	Went to work 1 to 2 days		Smoked but didn't enjoy it.
MOST UNFAVORABLE OUTCOME THOUGHT LIKELY	Went to school zero days this week	Didn't go to work this week	Didn't look for a job this week	Continued to smoke

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Figure 11. A sample problematic IPO follow-up guide.

HAWTHORNE HOUSE PROJECT Follow-up Guide Assessment Follow-up Guide <u>R</u> Date <u>3/11/75</u> Assessor <u>S/K</u> Date <u>3/15/75</u>		FOLLOW-UP GUIDE SCORES			
		Scale 1	Scale 2	Scale 3	Scale 4
A. Request confirmation that follow-up guide is exhaustive, or request additional scales. (20,0)	most satisfactory	T -10			C -4
B. Two adjacent blank cells. (20,20)	more than expected		B -20		T -0
C. Extrapolation possibilities unclear. (4,4)	expected			G -4	S -20
D. Interpolation possibilities unclear. (4,3)	less than expected	L -2			T -10
E. Date implied in follow-up guide contradicts specified follow-up date. (20,0)	most unsatisfactory	H -4			
F. Source of verification unclear. (2,1)	score	4	0	16	-14
G. Greater specification of item needed. (4,3)					
H. Request further distinction of 2 or more scale levels which may overlap. (4,4)					
I. Multi-dimensional scale: insert "and/or," or indicate if statements are intended as examples. (5,1)					
K. Assumption of cause-effect: request change or justification. (3,1)					
L. Have all possibilities been considered? (2,1)					
M. Unknown abbreviation or term. (0,0)					
N. Illegibility. (0,0)					
O. Insufficient program goals. IPO does not contain scales reflecting long range goals of resident. (10,0)					
P. Negative focus to goal: goal focuses on negative behavior. (10,0)					
Q. Relationship to mutual planning unclear. (10,0)					
R. No date: the date of mutual planning meeting and review date must be on the IPO. (5,0)					
S. No clear behavioral indicator. (20,0)					
T. Change in behavioral indicator: the same primary behavioral indicator must appear in each level. (10,0)					
U. Inconsistent scale heading. (5,0)					
Z. Other					

Figure 12. Face section of a sample follow-up guide scale assessment form.

FOLLOW-UP GUIDE COMMENTS			
SCALE 1	SCALE 2	SCALE 3	SCALE 4
Change in indicators from attendance to performance. Suggest carrying attendance through all levels then adding performance at this level as a second indicator, or using a separate scale for performance.			The most favorable outcome does not appear. If deciding to quit is the most favorable outcome, it should be moved to this level. Level 5 should be completed before level 4.
	Two adjacent blank levels; confirmation needed that working three days is as much as the resident can or should do.		Same as level 2.
		The behaviors that the resident is to use in looking for a job should be specified, such as going to the employment office, manpower office, going on certain number of interviews, etc.	No behavioral indicator. "Wanting" is not a behavior. Suggest using number of cigarettes or other objective indicators.
The possibility of 3 days attendance is not covered in this level or the level above.			The indicator is vague and also changes from the expected level. There is no indicator that appears at all levels.
These two levels overlap since "zero days" is "less than 2 days." Suggest using "1 to 3 days" at less than expected level and "zero days" at this level.			

Figure 13. Backside of a sample follow-up guide scale assessment form.

## CHAPTER VI

### EVALUATION OF SCALE ASSESSMENT

The goal of our assessment system has been to improve and standardize the quality of scales constructed by the Hawthorne House staff. In order to determine whether this goal was reached, an on-going evaluative component was employed. The evaluation was based on the assessment scores of the scales constructed. The scores were monitored over an eleven week period of time from January 12, to March 30, to determine whether there were any trends in the scores.

The evaluation of the data on scale assessment will be dealt with in Sections II and III in this chapter. Section II looks at the data on collated assessment scores for trends during the eleven week evaluation. Section III deals with the collation process by looking at the agreement in scoring between the two independent assessors. The research process is outlined in both sections and the findings are discussed.

#### I. EVALUATION OF SCALE ASSESSMENT DATA

The goal of scale assessment is to provide feedback to the staff on specific problematic features which appear in the IPO's in order to help the staff avoid those problems and therefore, produce better scales. The indicators for the goal are: 1) increase in the assessment scores during the assessment period; 2) reduction in the number of

specific problematic features appearing in the weekly IPO's during the assessment period.

To achieve the goal, data was collected on a weekly basis on the collated assessment scores for each scale of the five residents followed. The mean weekly assessment scores were then compared graphically for changes and trends over the eleven week period. Then data was collected on the specific problematic features which were found. This data was tabulated and analyzed for trends which occur during the assessment period.

Table II is the tabulation of mean collated assessment scores each week for each resident. Within the Table, resident identification A, B, C, D, and E, are the letter designations for the individual residents followed in the IPO program. The "Date of IPO" indicates the date on the scale being assessed. The scores indicated are the mean collated scores for the week. The "mean" is the overall mean for the resident. The group scores indicate the mean score for the five residents.

The data from the table indicates very little difference in the resident mean assessment scores. The scores range from 17.6 to 18.9 for the five residents followed for the entire time. From this data the assessment scores would not appear to be a function of the resident's personality or situation.

The individual scale assessment scores vary from 5 to 20. When plotted out as weekly mean scores for each resident, Figure 14, they show considerable fluctuation with little in the way of trend except that the last three weeks show consistent, high scores. When plotted



TABLE II  
WEEKLY ASSESSMENT SCORES FOR RESIDENTS

Resident	Date of IPO											Mean
	1/12	1/19	1/25	2/2	2/9	2/16	2/23	3/2	3/9	3/16	3/23	
A	18.5	16.3	15.3	20	*	20	20	17	20	20	20	18.9
B	11	18	14.5	15	18.3	18.3	17.5	20	20	20	*	17.6
C	13	16.8	16.5	20	19.8	19.7	16.8	19.4	20	20	20	18.4
D	11	16.5	19	16.7	19.3	18.1	18.5	19.8	19.7	20	18.5	18.0
E	14.3	19.2	18.2	15	20	20	19.8	19.8	17.3	19.5	19.3	18.6
Group	13.6	17.3	16.0	18.0	19.4	19.2	18.8	19.5	19.3	19.9	19.4	18.3

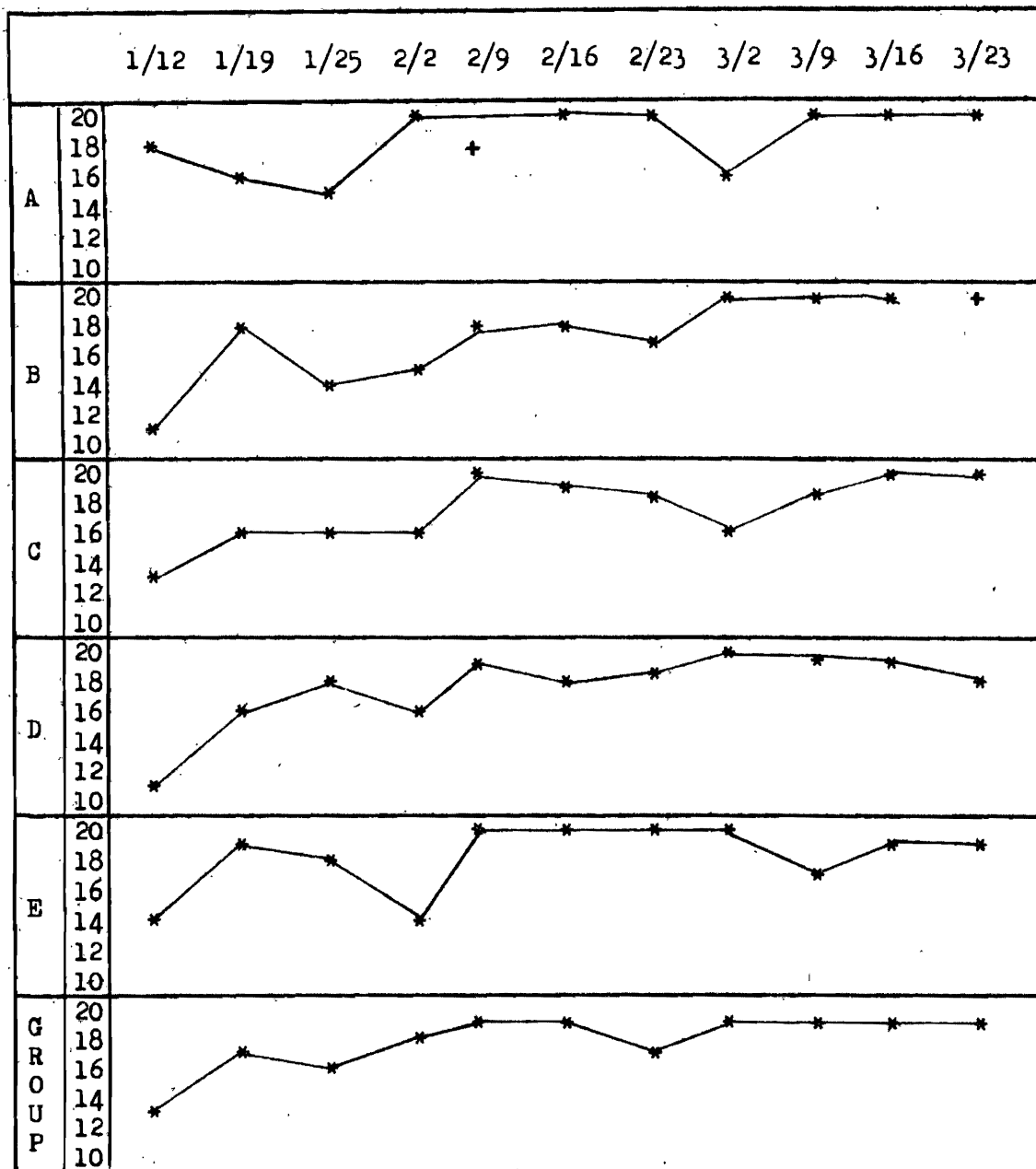
\* Assessment Score not available

by weekly group mean scores, which more accurately reflect the weekly skills of the staff in scale construction, there is a more pronounced trend. The scores run from 13.58 to 19.89. There is a substantial trend toward increased assessment scores with the passage of time. This trend shows itself on the graphical profile for the group. The scores level off after the seventh week at a mean score of 19.33 or higher. These high scores indicate near-perfect scale construction. (See Figure 14).

The data on frequency of problematic features indicates a similar trend. In Table III the data is tabulated showing the frequency with which each problematic feature occurs. The problematic features are indicated by the letter designation employed in the assessment process. The letters not appearing indicate that the feature did not show up on the weekly IPO's during the study. The marginals at the right are totals for each problematic feature found indicating the total number of times it appeared. The bottom marginals indicate the total number of problematic features or errors for each week and the number of scales used by the staff during the week. The number of errors per scale are then computed for each week.

This data indicates that the number of errors per scale decreases over time from a high of 1.3 errors per scale on the first week, to low of 0.11 errors per scale on March 16, the tenth week, then a slight increase to 0.50 on the last week of assessment. Interestingly, the number of scales used by the staff and residents increases steadily during the assessment period until the last week.

Looking at specific problematic features, the frequently occurring



**Figure 14.** Graphic profile of assessment scores

+ Assessment scores not available

TABLE III  
FREQUENCY OF OCCURRENCE OF PROBLEMATIC FEATURES

Problematic Feature Letter Designation	1/12	1/19	1/25	2/2	2/9	2/16	2/23	3/2	3/9	3/16	3/23	Total
A	1		1									2
B			1		2		2					5
C	2											2
D			1									1
F				1								1
G	2	4										6
H	1	1	5	3	1	2				1		14
L	2	1	1		1	2	4	3	2			16
P	1			1	1	1	1					5
Q	5	2	3	4			1	1				16
R						1		1				2
T		2					2					4
U		1									4	5
Z	1	2	1		5	5	5	2	3	1	1	26
Totals	16	12	12	9	10	13	11	7	5	2	5	103
Number of Scales	12	13	14	17	13	16	19	19	18	18	10	173
Errors/Scale	1.3	0.92	0.86	.53	.77	.81	.58	.37	.33	.11	.50	.60

features are item "H", "L", "Q", and "Z". Of these features "H" and "Q" show a marked decrease midway through the assessment period. Both of these are major problematic features; "Q" reflects a problem in the transition from mutual planning to the IPO scale, "H" refers to overlap between adjacent levels which make the scale hard to use at follow-up. The remaining two features appearing most frequently are "Z" and "L". Item "Z" is a catch-all category used for less severe problems and suggestions. Item "L" is important but not severe, as it refers to "Not covering all possibilities" in the scale which is an exercise in creativity more than technical competence.

Based on our data, the goal of producing better scales has been met. The assessment scores demonstrate a consistent and substantial increase during the assessment period. At the same time the number of problematic features decrease with the passage of time. These two indicators are related, but because of the wide range of point deductions for various problematic features, both indicators are needed to show the quantity and quality of improvement encountered.

## II. EVALUATION OF THE COLLATION PROCESS

The use of two independent assessors employed by the Program Evaluation Project was an attempt to maintain a measure of reliability in the assessment scores. The same process was employed in the Hawthorne House Project. Because the extensive research staff used by P.E.P. was not available to this project, quantitative evaluation of reliability is not possible. The use of the collation process did allow for qualitative evaluation of the scores by comparing the scores of the two independent assessors.

This comparison process involved data collection on the scores of both assessors for each scale assessed. The scores for each week were then converted to mean scores for each assessor for the week. The mean scores were compared to determine the amount of disagreement for the week.

The data obtained is tabulated in Table IV, "Scoring Differences Between the Two Independent Assessors by the Week." The table shows the mean scores for the two assessors for each of the eleven weeks. The numerical difference between the scores is then shown in the last column.

TABLE IV  
SCORING DIFFERENCES BETWEEN THE TWO  
INDEPENDENT ASSESSORS  
BY THE WEEK

Date of IPO	Mean Weekly Scores		Difference
	Assessors	Assessors	
1/12	12.3	14.8	2.5
1/19	16.9	17.7	0.8
1/25	17.6	14.3	3.3
2/2	18.7	17.3	1.4
2/9	19.2	19.5	0.3
2/16	19.0	19.2	0.2
2/23	19.5	18.0	1.5
3/2	19.1	19.5	0.4
3/9	18.9	19.8	0.9
3/16	20.0	19.8	0.2
3/23	18.8	20.0	1.2

The data indicates considerable consistency in the scoring except

for the first and third weeks. The remainder of the time the point difference is below 1.5. The range is from 1.5 on February 23, down to 0.2 on February 16 and March 16. The number of scales assessed after the third week increases steadily (Table III) so that there is a trend toward closer agreement on scores on an increasing number of scales.

Counter balancing the indication of a higher degree of agreement in assessor scores is the higher attainment scores. There are fewer problematic features encountered in the last seven weeks so there are fewer items to disagree on. Given this, the overall trend is that both independent assessors judged the scales as having higher assessment scores with a low degree of disagreement between them.

### III. SUMMARY

The use of scale assessment as a training tool in scale development has shown positive results. The data illustrates improvement in scale quality. There are other equally important skill advancements which are outside the scope of the objective data. One such gain was the staffs willingness to scale ever more difficult items. Particularly in the last four weeks of assessment the percentage of personal growth goals increased, and likewise the number of scales reflecting performance measurements rather than just attendance measurement increased.

Much of the progress in scale quality has to be attributed to the resident's coordinators' willingness to accept criticism and recommendations. This feedback was not only in terms of the written scale assessment, but also in biweekly conferences between the

researchers and the house staff to go over the recurring problematic features, and to go over questions that the researchers or house staff had.

The operation of this type of training system relies heavily on motivated staff who want to use the system, and/or, open communications between researchers and staff.



## CHAPTER VII

### PROGRAM EVALUATION

One of the strengths of the IPO system is the built-in evaluative usage. The attainment scores provide a numerical measure of the programs ability to help residents reach their goals. The attainment scores provide hard data on the treatment progress of individual residents, and on evaluation of the overall program functioning. In this Chapter we will look at both areas, treatment progress of individual residents and the overall functioning, that is, program evaluation. Because of the time framework in which data collection took place, the attainment data available is only on the weekly goals. Attainment scores on long-term goals were not available because of the follow-up dates (completion of the program) were not reached by residents during the eleven weeks of data collection.

We shall look at the weekly attainment scores on a descriptive basis to see the treatment progress of the individual residents. Then secondly we shall develop a model for using attainment data from the long-term IPO's for overall program evaluation.

#### I. EVALUATION OF DATA ON WEEKLY ATTAINMENT SCORES

The goal for the evaluation is to provide a descriptive analysis of the attainment profile of each resident and of the House during the eleven week period of January 12, 1975 through March 30, 1975. This

analysis includes a descriptive breakdown of the resident's performance in different goal areas and provides a descriptive breakdown of the residents general performance over the eleven week period.

In order to meet this goal, data was collected on the attainment scores of each resident on each mutually planned goal. The attainment scores reflect the resident's performance level at follow-up. The scores are computed by assigning numerical values of one to five to the possible outcome levels from most unfavorable to the most favorable levels of outcome. The data is descriptive data to reflect the attainment of resident goals rather than to measure behavioral change.

#### Residents' Performance By Goal Area

The data was analyzed for each resident by the content of the goal. This data was collapsed to look for trends in the programs ability to help residents in various goal areas. Table V "Frequency of Scale Headings Used During the Eleven Week Period," is the tabulation of scale headings used during the assessment period. There were forty-four scale headings used on 135 scales. The frequency with which the scale headings were encountered is indicated following the heading.

This data when compared to the review of scale headings during the September-October period shows a change away from scaling goals on house maintenance and discipline issues. This reflects the increase in resident involvement in goal setting, and the commitment toward focusing on positive behaviors in the goals.

This data on scale headings was collapsed into six goal areas. These areas were selected to reflect both reoccurring themes in the scales and also to reflect the program goal areas within which the goals fall.

TABLE V  
 FREQUENCY OF SCALE HEADINGS USED  
 DURING THE ELEVEN WEEK  
 PERIOD

* Scale Heading	Frequency
Job Attendance	15
GED Study	14
Job Search	11
Work	8
Reality Workshop	6
Volunteer Job Attendance	6
Career Planning	5
School Attendance	5
Want Ads	4
Look for Volunteer Work	4
Paint Sniffing	3
Personal Goal	3
Transcendental Meditation	3
Welding Training	3
Job Interview	3
Work Performance	3
Work Attendance	3
Manpower	3
Diet	3
Anthropology Class	2
Employment Office	2
Job Satisfaction	2
Earn Money	2
Letter Writing	2
Other	20 *

\* There were a total of 20 items which appeared only once

The goal areas and the individual headings from which the areas were derived are listed below:

1. JOB related goals-  
including job attendance, work performance, work attendance, work, volunteer job attendance, job satisfaction.
2. JOB SEARCH related goals-  
including job search, employment office, job interview, reality workshop, volunteer work search, want ads, manpower, career planning, resume.
3. EDUCATIONAL-VOCATIONAL related goals-  
including GED study, school release, school attendance, studying, anthropology class, drama/play, and welding training.
4. POST PLACEMENT LIVING related goals-  
including cost of living determination, savings transfer and talk with parents.
5. FINANCIAL related goals-  
including savings, money earned, money accounting.
6. PERSONAL goals-  
including the following scale headings: reading, learning new words, Doctors appointment, transcendental meditation, smoking dope, diet, personal goal, weight, clothes, house restrictions, return library books, communication, smoking, paint sniffing.

The attainment data was then tabulated for each resident by goal area (Table VI). The first column in the table is the coding for the residents followed in the program. The next six columns are the goal areas. The last column is the mean attainment score for the resident. Group averages are tabulated at the bottom of the table.

The attainment scores range from 1.0 to 5.0. The individual residents show considerable fluctuation in goal area scores. Each resident shows strength in different goal areas. This is illustrated

TABLE VI  
GOAL ATTAINMENT SCORES FOR RESIDENT BY GOAL AREA

Resident	Job	Job Search	Education/Vocation	Post Placement Living	Financial	Personal	Mean
A	2.58	*	2.60	1.00	1.00	1.77	2.22
B	3.00	*	3.0	*	*	3.50	3.22
C	3.69	3.14	2.15	*	3.0	3.0	2.89
D	2.75	2.66	3.64	*	5.0	2.0	3.01
E	1.94	2.09	5.0	4.0	*	2.5	2.36
Group	2.69	2.75	2.80	2.50	3.0	2.67	2.75
	n=39	n=35	n=29	n=4	n=4	n=24	n=135

n = Number of scales

\* = Attainment score not available

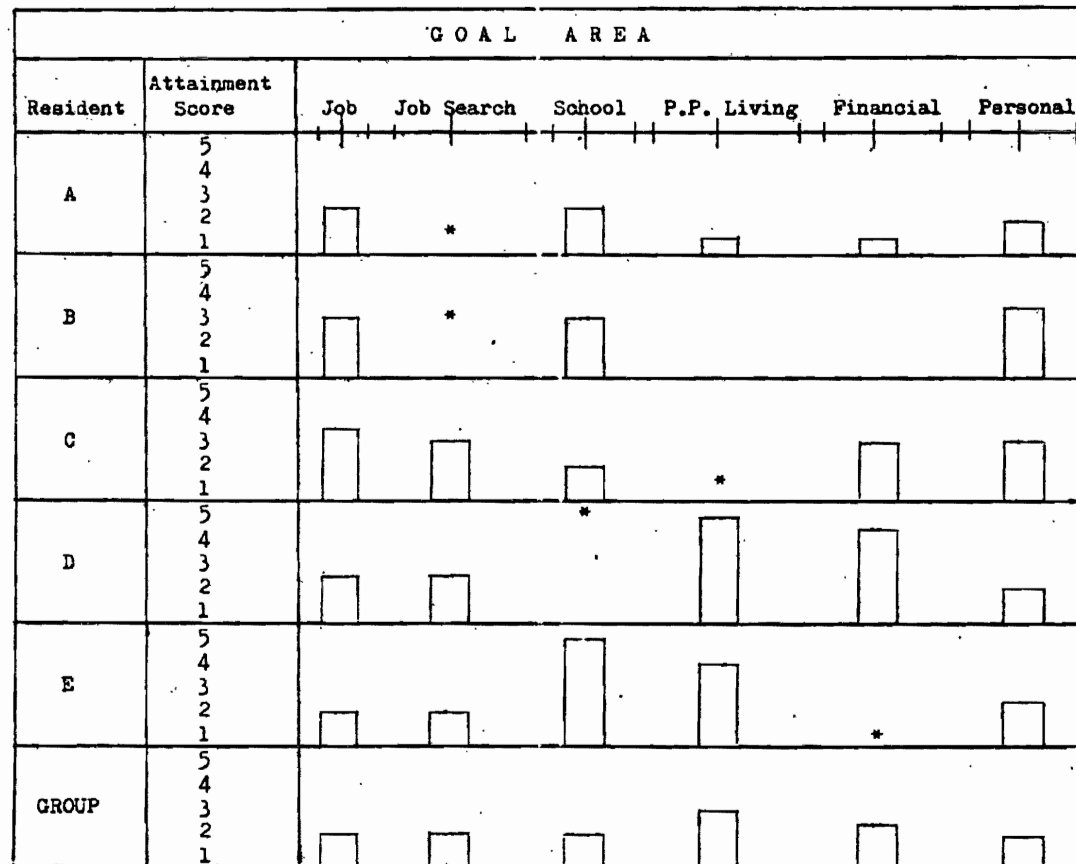


Figure 15. Attainment of goals of residents by goal area.

graphically in Figure 15. There are no apparent trends in the individual residents' scores. When computed for the group, the trends are more noticeable. The scores tend to be more even for the group than for any of the individual residents. The range on the four frequently used goal areas is from 2.67 to 2.80. The tendency is for scores to fall slightly below the expected level of outcome in the primary goal areas.

The data in Figure 15 also demonstrates more consistency in the scores for the group in each goal area than it does in the scores between individual residents. We can collapse the data further into four categories--Financial, Educational/Vocational, Post-Placement Living, and Personal Goals--to reflect the four primary goal areas of the IPO program. This can be done by combining the Job, Job Search, and Financial categories. The figures are then Financial 2.73, Educational/Vocational 2.80, Post-Placement Living 2.50, Personal 2.67. The conclusion from these figures is that the Hawthorne House staff is delivering quite consistently in the four areas in which it is committed to providing service.

#### Residents' Performance By The Week

The attainment data can also be used to evaluate the progress of the residents and the weekly functioning of the house. Table VII, "Goal Attainment Scores for Residents by the Week," provides a tabulation of data over the eleven week evaluation period. The Table indicates the mean attainment score of each resident each week. The right hand marginals are the mean score of each resident for the entire evaluation period. The weekly group means are indicated at the bottom.

TABLE VII  
GOAL ATTAINMENT SCORES FOR RESIDENTS BY THE WEEK

Resident	Week											Mean
	1/12	1/19	1/25	2/2	2/9	2/16	2/23	3/2	3/9	3/16	3/23	
A	3.0	3.67	*	3.53	*	3.67	1.00	4.00	1.25	2.5	1.33	2.22
B	4.0	2.0	2.0	2.75	2.75	2.5	2.5	5.0	5.0	3.5	*	3.22
C	2.67	3.75	3.0	3.0	3.0	2.83	3.0	3.3	1.95	2.75	2.9	2.89
D	2.67	3.0	*	3.25	3.0	1.75	3.0	*	3.5	3.77	3.0	3.01
E	*	*	3.25	2.0	1.67	1.5	2.5	*	2.0	3.0	1.8	2.36
Group	2.89	3.3	2.8	3.18	2.63	2.75	2.57	3.89	2.49	2.77	2.24	2.75

\* Attainment score not available



The individual goal attainment scores cover the entire range of 1.00 to 5.00. The fluctuations show no specific trends when viewed by individual residents. When the data is computed for the group, we do see some trends. The weekly attainment scores for the composite group tend to be consistent at slightly below the expected level of attainment.

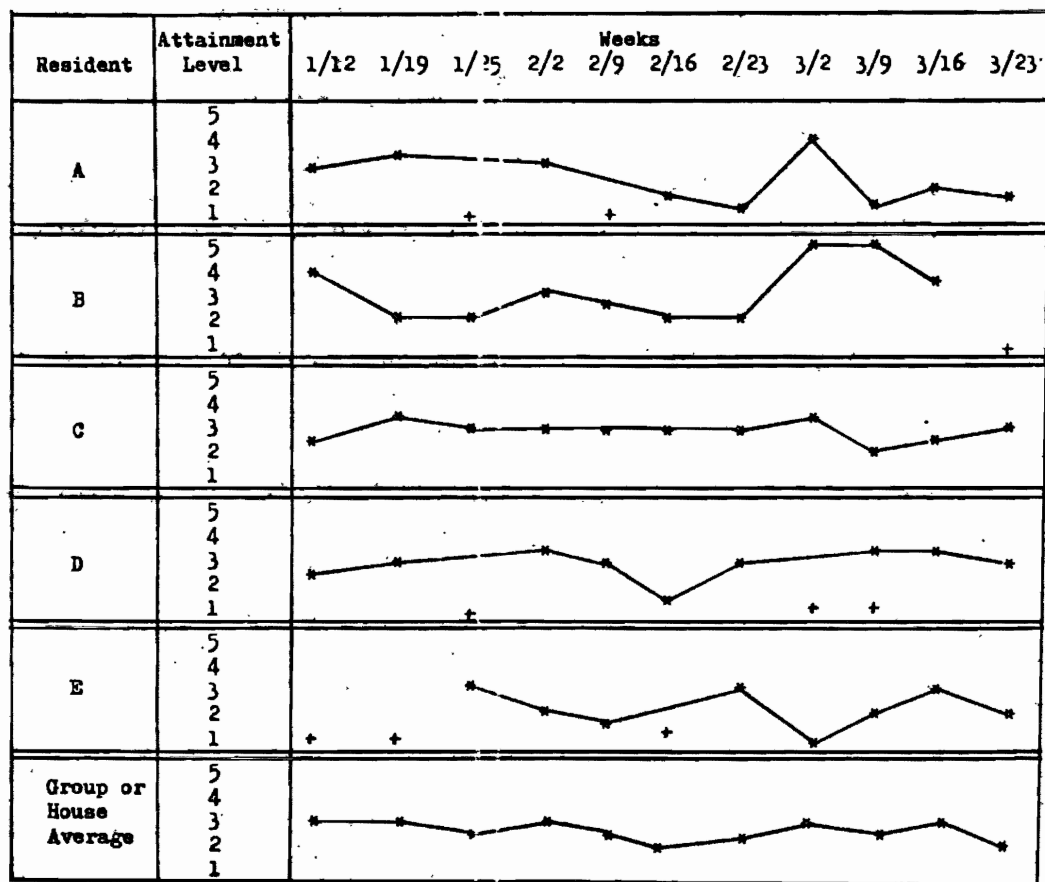
The trends are more apparent by looking at Figure 16, "A Graphic Profile of Attainment Scores for Residents by the Week." This figure compares the weekly attainment scores of each resident and of the group over the eleven week period. This reflects the variety of individual attainment scores and the substantial regression toward the mean when computed as a group.

The residents do not show any trends toward increased or decreased attainment scores over time. They do show a tendency to center around the expected level of outcome. This reflects realistic goal setting overall by the residents and staff together.

The regression toward the expected level of outcome indicates the relatively consistent operation of the house despite the wide fluctuation in individuals. The data provides evidence that the Hawthorne House is operating consistently and effectively in helping residents meet their individual weekly goals.

## II. OVERALL PROGRAM EVALUATION DESIGN

The data from the attainment scores on long-term goals provide a means for assessing the effectiveness of the program in achieving its goals. There are two ways that the data can be used to develop



**Figure 16.** A graphic profile of attainment scores for residents by the week.

+ No attainment score available

develop indicators toward the program goal. The following discusses these two methods.

Percentages - The first method is to determine the percentage of residents who attain the expected level of outcome. The percentage figure is determined by marking the outcome level on the long-term IPO follow-up guide at the time the resident leaves the program. The follow-up guides are reviewed to determine the number of scales marked at the expected level or higher. The number is converted to a percentage figure. An example of the review finding could be:

70% of the goals set by the residents completing the program between July 1, 1975 and June 30, 1976 were attained at the expected level or higher.

Numerical Score - The second method would utilize data from numerical scores. The scores are computed on long-term goals using the same scoring procedure employed on the weekly IPO's. The scores are tabulated and the mean attainment scores are computed from the data. The mean is computed for all goals of residents completing the program and for each goal area. The mean scores are then compared to target scores set by the program. A target score could be for example:

A mean attainment score of 2.60 for all residents completing the program between July 1, 1975, and June 30, 1976.

Data from both methods of measurement can be incorporated into traditional program evaluation formats. An example of incorporating attainment data into the Janis' POPS format is provided below. The productivity indicators listed are supplemental to the already existing indicators for the program.

Program Goal:

Janis seeks to reduce the level of social dependency and to increase the level of self-sufficiency among the target population.

Objective #1:

To reduce and alter the pattern of social and anti-social behavior of Janis participants.

## Productivity Indicators

- a) The percentage of residents attaining the expected level of outcomes on Personal growth goals on long-term IPO's.

Target - 80%

- b) The mean attainment score on the personal growth goals on long-term IPO's.

Target Score - 2.80

Objective #2:

To improve the educational and/or vocational related skills of Janis participants.

## Productivity Indicators

- a) The percentage of residents attaining expected level of outcome educational/vocational long-term IPO goals.

Target - 80%

- b) The mean attainment score on educational/vocational goals on long-term IPO's.

Target Score - 2.75

Objective #3:

To obtain and maintain employment for those Janis participants not in educational or training programs.

## Productivity Indicators

- a) The percentage of residents attaining the expected level of outcome on financial independence goals on long-term IPO's

Target - 80%

- b) The mean attainment score on financial independence goals on long-term IPO's.

Target-mean Score - 2.75

Objective #4:

To maintain Janis residential graduates in a stable living situation for one year after graduation from residential program.

## Productivity Indicators

- a) The percentage of residents attaining the expected level of outcome on post-placement living goals on long-term IPO's

Target - 80%

- b) The mean attainment score of residents on post-placement living goals on long-term IPO's.

Target-mean Score - 2.75

The numerical system provides a more specific indication of how the program functions. If some residents score very high and some score low the mean gives credit to both groups. The percentage figure may be somewhat misleading, if one-half the residents score at level two and one-half score at level four. The percentage indicates 50% of residents meeting their goals. It does not give credit to the continuum aspect of scaling. A numerical scoring would give the program a mean attainment score of 3.0, or expected level of outcome. The two methods emphasize different aspects of the functioning of the IPO system.

There are some cautions that must be dealt with in using the attainment scores for program evaluation. Long-term goals can be changed during the course of the residents stay. The program must allow for changes in goals but must be careful not to allow goals to be lowered toward the end of the residents stay to artificially increase the attainment score. Secondly, the staff must be cautious about altering the time frame for the resident. The extensions of the resident's stay to provide him more time to complete his goal will

create higher attainment scores. The program needs to decide when changes are necessary for treatment purposes.

The evaluation instrument should be used to provide the data that is most useful to the program; to be useful it must require a minimum of staff time. Janis will probably never have an extensive research staff. The two evaluation methods outlined in this section can be done with a minimum of staff time.

## CHAPTER VIII

### CONCLUSIONS AND IMPRESSIONS

In terms of the contract with Janis, the commitments were met by both the Janis staff and the researchers. The program developed is now in operation and is effective. The development went smoothly. The Janis program decentralization allowed the House to develop a system out of need and relevance. The experience in developing the program has brought to light many implications about the programs strong points and areas of concern. This chapter discusses these implications and the conclusions of the researchers.

#### I. STRONG POINTS IN THE PROGRAM

The IPO program provides benefits in three areas: 1) management of the House treatment program; 2) direct therapeutic value to the resident; 3) administrative use in planning and evaluation.

##### House Treatment Program

The IPO strengthens the treatment process of the House, providing a systematic, measurable system to support the general Glasser framework of Janis. The specificity of the IPO system reduces the vagueness and ineffectiveness of looser contract systems. It maintains the resident's responsibility for his treatment, and brings the treatment purpose of Janis into constant awareness of the resident. The IPO program provides staff feedback on how the resident is functioning.

It makes the framework for assignment of large consequences more explicit and clear, particularly in releasing residents from the program for failure to meet program expectations.

The IPO provides a tool, the mutual planning conference, for discussing the behaviors and problem areas with the resident. The conference and the follow-up guide focusing on what is important to the resident, providing a less threatening atmosphere for the resident to explore his behavior.

The planning and commitment aspects of the IPO provide a time structuring function for the resident (planning their week). The time structuring element of the IPO has become an important aspect of the Hawthorne House program. The planning function can consume considerable staff time if it is not done in this systematic way.

Finally, the IPO program, because it is highly structured, provides consistency in the way the staff deals with the residents. This consistency is crucial in dealing with adolescents.

#### Therapeutic To Residents

The program value, in and of itself, has therapeutic value to the residents. It helps bring about fundamental change in the way that the resident sees himself. The target population is one of drug abusers. The goals focus away from delinquency issues and allow the resident to see himself outside of the delinquency label. The success experience as indicated before, also helps build the new self-image.

The scaling process contains benefits. It helps change the dichotomous thinking common to acting out adolescents. It focuses on a range of outcome behaviors, rather than using a simple pass-fail



system.

The process of goal setting brings a time perspective to residents. It helps them focus on the future. It helps them learn how to set their own goals and to break the goals into small steps in order to make them achievable.

#### Administrative Benefits

The benefits to the administration lie in the straight-forward evaluative system of the IPO, and in the information provided by the system. The evaluative system has been thoroughly discussed elsewhere. The information gathering function provides a qualitative statement about the program. The IPO system allows the program directors to see beyond the erratic performance that is typical of adolescents and look at group functioning. If the group is functioning consistently, the program is operating effectively and within acceptable limits. The research project indicates this is true in the Hawthorne House program. If the group performance becomes erratic, the IPO system provides feedback to locate the trouble spots; such as, goals set too high, goals set too low, lack of resident involvement in goal setting, individual members who consistently pull the group down, etc. The information would not be available in a less structured system.

## II. CONCERNS IN USING THE IPO SYSTEM

Several cautions must be given in terms of the system described in this paper. These concerns are dealt with below.

First, there are validity difficulties of which staff using the instrument must be aware. The goals used by the resident may not

be valid. The IPO process presupposes that the adolescent can and will know what he wants, and that once he knows, the goal will remain relevant. In actuality this might not be the case. If the resident's goal is not relevant, the resident's commitment will be lacking. The score is only valid if the goal is realistic, and relevant. The validity will be undermined if staff or resident underestimate or overestimate their capabilities. In other words, the score reflects the quality of the goal selection process as much as it does the performance or progress of the resident.

Another area of concern is the amount of staff time and skill involved in the process. It requires about four hours a week per staff member to manage the weekly IPO's. And prior to the actual use, several months of training are required for staff to develop skills in scaling. The time commitment can be a liability unless the staff is very much invested in the tool, as the Hawthorne House staff was.

The final concern is the difficulty of balancing flexibility and stability in a treatment program for essentially labile adolescents. The inflexibility of goals can be useful in leveling the mood swings but can also render the goal irrelevant to the resident. The concern is probably best dealt with by assessing the situation cautiously before allowing changes in resident goals.

### III. SUMMARY

The strength's of the IPO program are real, so are the concerns. The balance is in favor of the strengths, if some precautions are taken. The attainment scores, though, should not be used as the only measure

of program success because of the validity concerns. The IPO system provides an explicit structure to make the treatment environment more predictable. This is probably the most forceful overall impact of the IPO program.

The IPO system has been developed and tested in one House of the Janis program. Two other Houses are now ready to utilize the system. It is not expected that the system outlined in this paper will be transferred in toto. Nor is it expected that the system will remain forever unchanged in the Hawthorne House. The program, to remain relevant, has to allow for changing resident needs and changing staff energies.

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## APPENDICES

## APPENDIX A

### CONTRACT FOR SERVICE

#### Program

A Social Work research practicum in developing a Goal Attainment Scaling system in a pilot project for the Hawthorne House of the Janis program.

#### Problem Statement

A problem for the Hawthorne House with a resident population of adolescent drug offenders is:

- A. Lack of objective data on client movement.
- B. Lack of consistent, structured treatment planning.
- C. Difficulty focusing treatment planning on positive achievements and away from problem identification.
- D. Resident population with orientation to failure, and little goal setting experience.

#### Program Development

GOAL: To modify the GAS to make it applicable to the Janis Program, as a tool for involving residents in setting and reaching their own positive goals, and also provide a research tool for assessing the Program services in helping residents meet their own goals.

#### Objectives

- A. To provide a resource file of materials concerning GAS.

- B. To provide a written guide for construction of scales.
- C. To develop scale assessment services and provide these services to the Hawthorne House for a three month period.
- D. To incorporate long-range and short-term IPO's into a consistent overall treatment plan.
- E. To standardize the selection of goal areas for resident participants.
- F. To provide a collection of sample scales for reference in scale construction.
- G. To provide an evaluation design for the GAS program.
- H. To provide statistical analysis and descriptive data on GAS program through March, 1975.
- I. Provide written statement on the Janis GAS Program.



## APPENDIX B

### SCALE CONSTRUCTION GUIDE

#### I. PURPOSE

The purpose of the Guide is to help develop a useable goal attainment scaling system for the Janis Program. This Guide is being developed for the Hawthorne House to be revised for general applicability to other Janis houses.

#### General Information About Goal Attainment Scaling

Goal Attainment Scaling is a tool developed by the Minneapolis based Program Evaluation Project for use with recipients of Out-patient mental health services during treatment. The tool provides a multi-variable scaled description continuum which can be used to identify problems, define the treatment objectives, and provide an outcome measurement.

G.A.S. is constructed so that the expectations of the treatment outcomes are specified on a five point scale ranging from the most favorable to the least favorable outcomes for each area of client concern toward which treatment is directed. The scale is constructed so that the mid-point is the most likely outcome of treatment.

There are four basic steps involved in goal attainment scaling. First is collection of information about individuals for whom goals will be scaled. Secondly, the specification of areas where change for

the individual would be realistic and helpful. Thirdly, development of specific predictions for a series of outcome levels for each area. Lastly, the scoring of the outcomes as they are achieved within the specified time.

## II. JANIS APPLICABILITY

The original G.A.S. model has been modified to meet the particular needs of Janis. The following are specific requirements for application of G.A.S. to Janis.

### 1. Mutual Planning:

The resident and the houseparent establish goals together. A large part of the therapeutic content of the program involves the resident selecting and reaching his own goals with the help of the staff.

### 2. Achievable Goals:

Goals must be selected which are achievable within the time frame. The therapeutic value is destroyed if success is not experienced by the resident on weekly goals. Success breaks the resident's cycle of failure.

### 3. Positive Goals:

The goals should be stated in the positive, related to things that the resident wants to achieve. Avoid focusing on problems particularly drug and legal problems. Avoidance of a negative behavior is not considered a positive goal.

### 4. Use of Coordinated Long-Range and Short-Term Goals:

Janis will couple the long-range treatment length goal system with a weekly goal system. This will provide the overall measurement of a goal achievement during treatment with the therapeutic experience of goal development and attainment on a weekly, immediate basis.

### 5. Client As Information Source:

Goals should be constructed with it kept in mind that the resident will be the principal source of information on achievement. It is possible to use collateral sources.

If collateral sources are to be used this should be indicated on the I.P.O.

6. A minimum of three scales are to be used on long-range and short-term I.P.O.'s. No maximum is set, but four is a convenience maximum since this is the limit for one form.

### Completion Process

1. Use weekly I.P.O. Planning Sessions to define goal areas and objectives. Help resident define objective in concise measurable form to use as expected level of success.
2. Establish time length for scale. Developing outcome scale using the following steps:
  - a. establish expected level of success as mid-point.
  - b. establish most and least likely extremes.
  - c. establish more and less than expected outcomes.
3. Conduct follow-up interview at end of time period specified. Obtain information on performance. Mark outcome level on each scale of I.P.O.

### III. SPECIFIC CONCERNS IN SCALE CONSTRUCTION

1. Date each I.P.O. indicating when the goal was contracted and when it is to be reviewed.
2. Scales must contain clear, observable indicators, such as behaviors, actions, material production, so that any outside person could score them.
3. Scales should contain only one major indicator unless several indicators would consistently vary together or demonstrate a logical progression.
4. Only use scales for which you can find clear indicators.
5. Carry the same indicator through all levels of the scale.
6. Use numerical measurements for level determination rather than comparatives, or percentages.

7. Write levels so that an eight year old could understand with clear simple words, avoid abbreviations, jargon, etc., be specific.
8. Avoid any causal implications in the scales. The cause of behavior change is unimportant and probably cannot be accurately measured.
9. Complete both extremes on each scale making the extremes possible but also exhaustive: such as, three or less items or twelve or more items.
10. Complete all five levels to each scale even if one level could be clearly inferred from it's neighboring levels.
11. Write legibly.

# APPENDIX C

## DESCRIPTION OF CATEGORIES OF PROBLEMATIC FEATURES AND THE RECOMMENDED POINT DEDUCTION ASSOCIATED WITH EACH CATEGORY

Capital Letter Designation For Category	Items Included on Goal Attainment Follow-Up Guide Assessment Form	Reason for Inclusion of This Item on the Assessment Form	Recommended System of Point Deductions (Pre-Negotiation)	
			First Occurrence	Each Subsequent Occurrence
A	Request confirmation that follow-up guide is exhaustive, or request additional scales	It has been agreed by consensus of staff members that, except in rare instances, a follow-up guide should contain at least three scales in order to be an instrument of evalua- tion showing a representative profile of a client's problem	20 - (should be scored as if a separate scale were being averaged into the mean Assessment Guide)	
B	Two adjacent blank cells	A scale on which two adjacent cells are blank does not give sufficient cues for follow-up scoring, so that the follow-up guide is confusing and too variable.	-20	-
C	Extrapolation possi- bilities unclear.	It is important that a scale's "outer extremes" be scoreable at follow-up, and that it is clear what "type" or "class" of outcomes belongs at these levels (if there is a <u>single outcome clearly implied at the extreme</u> <u>but this outcome is not</u> <u>written in, this does not</u> <u>represent a deficiency in</u> <u>scaling.</u> )	-4	-4

D	Interpolation possibilities unclear.	It is important that intermediate blank cells be scoreable at follow-up, and that the implied content of these blank cells be clear to the follow-up interviewer.	-4	-3
E	Date implied on follow-up guide contradicts specified follow-up date.	Outcomes specified must be appropriate and attainable in relation to the follow-up date specified		Entire follow-up guide is invalid and receives an assessment score of 0.
F	Score of verification unclear.	It is important that, when attempting to gain information necessary to score a scale, the follow-up interviewer be clear as to whom his contact source should be. The source could be the client, a relative, employer, governmental agencies, hospitals, spouse, etc.	-2	-1
G	Greater specification of item needed.	Scale items need to be clearly quantified, or have clear examples or other specific indicators. Terms such as "better," "happier," and "decrease," are not acceptable unless additional specification is also provided.	-4	
H	Request distinction of 2 or more scale levels which appear to overlap	If a scale is potentially scoreable at more than one level, it is frequently troublesome to follow-up interviewers.	-4	
I	Scale with more than 2 variables; perhaps split, insert "and/or," or indicate if statements are intended as examples	A scale containing two or more variables which may not vary in the same manner can easily make it impossible for the follow-up interviewer to score the scale on just one level. If the scale is scored on two or more levels, the Goal Attainment score cannot be calculated because the outcomes are not clear	-5	

K	Assumption of cause-effect; request change of justification.	The linkage of outcome specified on the follow-up guide to a particular cause is generally not recommended. In many cases the cause of the particular outcome indicated is irrelevant, or difficult to discover. An action can be observed, but the cause is not always apparent.	-3	
L	Have all possible outcomes been considered?	In order to increase the likelihood that a scale will be scoreable at follow-up, it is important that all outcomes thought possible for a particular client be accounted for on the scale (i.e., either specified or clearly implied by means of a blank cell).	-2	
M	Unknown abbreviation or term	Self-explanatory.	None	
N	Illegibility	Self-explanatory.	None	
O	Insufficient Program Goals.	I.P.O. does not contain scales reflecting long-range goals of treatment.	-10	None
P	Negative Focus to Goal.	Goal focuses on negative behavior, or decrease in frequency of negative behavior.	-10	None
Q	Relationship to Mutual Planning unclear.	The expected level of attainment and the mutual planning objective should be essentially the same.	-10	None
R	No Date.	The date of mutual planning meeting and the review date must be on the I.P.O.	-5	None
S	No clear behavioral indicator	The goal does not contain a behavioral indicator which could be measured objectively.	-20	None
T	Change in behavioral indicator.	The same primary behavioral indicator must appear in each level. A change in the primary indicator leaves the scale unmeasurable.	-10	None

U.	Inconsistent scale heading.	The scale heading should be reflected in primary indicator of the scale.	-5	None
2	Other	This category refers to a problem area not covered by any of the above items, but is of sufficient importance to be indicated on the guide assessment form.		Variable